



SUSANA MARTINEZ
Governor

JOHN A. SANCHEZ
Lt. Governor

**NEW MEXICO
ENVIRONMENT DEPARTMENT**

**Harold Runnels Building, N2050
1190 South St. Francis Drive (87505)
P.O. Box 5469, Santa Fe, NM 87502-5469
Phone (505) 827-0187 Fax (505) 827-0160
www.env.nm.gov**



BUTCH TONGATE
Cabinet Secretary

J. C. BORREGO
Deputy Secretary

Certified Mail - Return Receipt Requested

March 16, 2017

Mr. Chuck McMahon
Assistant County Manager
Dona Ana County Utilities
845 North Motel Blvd
Las Cruces, New Mexico

**Re: Dona Ana County South Central Treatment Plant; Major Municipal; SIC 4952; NPDES
Compliance Evaluation Inspection; NM0030490; January 27, 2017**

Dear Mr. Chuck McMahon:

Enclosed please find a copy of the report and check list for the referenced inspection that the New Mexico Environment Department (NMED) conducted at your facility on behalf of the U.S. Environmental Protection Agency (USEPA). This inspection report will be sent to the USEPA in Dallas for their review. These inspections are used by USEPA to determine compliance with the National Pollutant Discharge Elimination System (NPDES) permitting program in accordance with requirements of the federal Clean Water Act.

Introduction, treatment scheme, and problems noted during this inspection are discussed in the "Further Explanations" section of the inspection report.

You are encouraged to review the inspection report, required to correct any problems noted during the inspection, and advised to modify your operational and/or administrative procedures, as appropriate. If you have comments on or concerns with the basis for the findings in the NMED inspection report, please contact us (see the address below) in writing within 30 days from the date of this letter. Further, you are encouraged to notify in writing both the USEPA and NMED regarding modifications and compliance schedules at the addresses below:

Racquel Douglas
US Environmental Protection Agency, Region VI
Enforcement Branch (6EN-WM)
1445 Ross Avenue
Dallas, Texas 75202-2733

Sarah Holcomb
New Mexico Environment Department
Surface Water Quality Bureau
Point Source Regulation Section
P.O. Box 5469
Santa Fe, New Mexico 87502

Dona Ana County South Central Treatment Plant
March 16, 2017
Page 2

If you have any questions about this inspection report, please contact Barbara Cooney at (505) 827-0212 or at barbara.cooney@state.nm.us.

Sincerely,

/S/ Sarah Holcomb

Sarah Holcomb
Program Manager
Point Source Regulation Section
Surface Water Quality Bureau

cc: Carol Peters-Wagnon, USEPA (6EN-WM) by e-mail
Brent Larsen, USEPA (6WQ-PP) by e-mail
Gladys Gooden- Jackson, USEPA (6EN-WC) by e-mail
NMED District 3, Michael Kesler by e-mail



Form Approved
OMB No. 2040-0003
Approval Expires 7-31-85

NPDES Compliance Inspection Report

Section A: National Data System Coding

Transaction Code	NPDES	yr/mo/day	Inspection Type	Inspector	Fac Type
1 N 2 5 3 N M 0 0 3 0 4 9 0 11 12 1 7 0 1 2 7 17 18 C 19 S 20 1					
Remarks					
D O N A A N A C T Y S O U T H C E N T R A L R E					
Inspection Work Days	Facility Evaluation Rating	BI	QA	Reserved	
67 1 69	70 3	71 N 72 N 73 74 75 M A J O R 80			

Section B: Facility Data

Name and Location of Facility Inspected (For industrial users discharging to POTW, also include POTW name and NPDES permit number) South Central Regional Wastewater Treatment Facility. From Las Cruces take I-25 east, travel to NM 227 (Vado Exit), turn south on NM 478, turn west on NM 189 (Esslinger Road), turn south on Montes Road, turn east on E. Sloan Road and travel approximately 0.5 miles. Doña Ana County	Entry Time /Date 10:20 Hours / January 27, 2017	Permit Effective Date November 1, 2013
	Exit Time/Date 12:50 Hours / January 27, 2017	Permit Expiration Date October 31, 2018
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) Mireya Carnero /Utility Director/ Operations Manager/ 575-525-6194, cell 621-5084 fax 525-6199 Jesus "Chuy" Reyes/Laboratory Technician/ 505-525-6194, cell 505-528-9820, fax 505-525-6199	Other Facility Data LAT 32.090321 N LONG -106.659938 W SIC 4952	
Name, Address of Responsible Official/Title/Phone and Fax Number Chuck McMahon, Assistant County Manager, County of Doña Ana, 845 North Motel Boulevard, Las Cruces, New Mexico 88007 / Utilities Director / 575-647-7142 and fax 525-6199	Contacted Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

Section C: Areas Evaluated During Inspection (S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

S	Permit	M	Flow Measurement	M	Operations & Maintenance	N	CSO/SSO
S	Records/Reports	S	Self-Monitoring Program	S	Sludge Handling/Disposal	N	Pollution Prevention
M	Facility Site Review	N	Compliance Schedules	M	Pretreatment	N	Multimedia
M	Effluent/Receiving Waters	S	Laboratory	N	Storm Water	N	Other:

Section D: Summary of Findings/Comments (Attach additional sheets if necessary)

SEE REPORT AND FURTHER EXPLANATIONS.

Name(s) and Signature(s) of Inspector(s) /S/ BARBARA COONEY	Agency/Office/Telephone/Fax NMED/SWQB	Date 3-15-2017
Signature of Management QA Reviewer /S/ JENNIFER FOOTE	Agency/Office/Phone and Fax Numbers NMED/SWQB	Date 3-16-2017

Doña Ana County South Central Regional Wastewater Treatment Facility		PERMIT NO. NM0030490
SECTION A - PERMIT VERIFICATION		
PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS <input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA (FURTHER EXPLANATION ATTACHED NO __)		
DETAILS: The responsible party is now Mr. Chuck Mc Mahon, Assistant County Manager		
1. CORRECT NAME AND MAILING ADDRESS OF PERMITTEE		<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA
2. NOTIFICATION GIVEN TO EPA/STATE OF NEW DIFFERENT OR INCREASED DISCHARGES		<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA
3. NUMBER AND LOCATION OF DISCHARGE POINTS AS DESCRIBED IN PERMIT		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
4. ALL DISCHARGES ARE PERMITTED		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
SECTION B - RECORDKEEPING AND REPORTING EVALUATION		
RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT. <input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA (FURTHER EXPLANATION ATTACHED NO __)		
DETAILS:		
1. ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRs.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
2. SAMPLING AND ANALYSES DATA ADEQUATE AND INCLUDE.		<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA
a) DATES, TIME(S) AND LOCATION(S) OF SAMPLING		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
b) NAME OF INDIVIDUAL PERFORMING SAMPLING		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
c) ANALYTICAL METHODS AND TECHNIQUES.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
d) RESULTS OF ANALYSES AND CALIBRATIONS.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
e) DATES AND TIMES OF ANALYSES.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
f) NAME OF PERSON(S) PERFORMING ANALYSES.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
3. LABORATORY EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS ADEQUATE.		<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA
4. PLANT RECORDS INCLUDE SCHEDULES, DATES OF EQUIPMENT MAINTENANCE AND REPAIR.		<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA
5. EFFLUENT LOADINGS CALCULATED USING DAILY EFFLUENT FLOW AND DAILY ANALYTICAL DATA.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
SECTION C - OPERATIONS AND MAINTENANCE		
TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED. <input type="checkbox"/> S <input checked="" type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA (FURTHER EXPLANATION ATTACHED YES __)		
DETAILS: Grit Removal System is out of service.		
1. TREATMENT UNITS PROPERLY OPERATED.		<input type="checkbox"/> S <input checked="" type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA
2. TREATMENT UNITS PROPERLY MAINTAINED.		<input type="checkbox"/> S <input type="checkbox"/> M <input checked="" type="checkbox"/> U <input type="checkbox"/> NA
3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED.		<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA
4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE.		<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA
5. ALL NEEDED TREATMENT UNITS IN SERVICE.		<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA
6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED.		<input type="checkbox"/> S <input checked="" type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA
7. SPARE PARTS AND SUPPLIES INVENTORY MAINTAINED.		<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA
8. OPERATION AND MAINTENANCE MANUAL AVAILABLE.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA

Doña Ana County South Central Regional Wastewater Treatment Facility		PERMIT NO. NM0030490
SECTION C - OPERATIONS AND MAINTENANCE (CONT'D)		
9. HAVE BYPASSES/OVERFLOWS OCCURRED AT THE PLANT OR IN THE COLLECTION SYSTEM IN THE LAST YEAR? IF SO, HAS THE REGULATORY AGENCY BEEN NOTIFIED? HAS CORRECTIVE ACTION BEEN TAKEN TO PREVENT ADDITIONAL BYPASSES/OVERFLOWS?		<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA
10. HAVE ANY HYDRAULIC OVERLOADS OCCURRED AT THE TREATMENT PLANT? IF SO, DID PERMIT VIOLATIONS OCCUR AS A RESULT?		<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA
SECTION D - SELF-MONITORING		
PERMITTEE SELF-MONITORING MEETS PERMIT REQUIREMENTS. DETAILS:		<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA (FURTHER EXPLANATION ATTACHED <u>NO</u>).
1. SAMPLES TAKEN AT SITE(S) SPECIFIED IN PERMIT.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
2. LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
3. FLOW PROPORTIONED SAMPLES OBTAINED WHEN REQUIRED BY PERMIT.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
4. SAMPLING AND ANALYSES COMPLETED ON PARAMETERS SPECIFIED IN PERMIT.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
5. SAMPLING AND ANALYSES PERFORMED AT FREQUENCY SPECIFIED IN PERMIT.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
6. SAMPLE COLLECTION PROCEDURES ADEQUATE		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
a) SAMPLES REFRIGERATED DURING COMPOSITING.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
b) PROPER PRESERVATION TECHNIQUES USED.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
c) CONTAINERS AND SAMPLE HOLDING TIMES CONFORM TO 40 CFR 136.3.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
7. IF MONITORING AND ANALYSES ARE PERFORMED MORE OFTEN THAN REQUIRED BY PERMIT, ARE THE RESULTS REPORTED IN PERMITTEE'S SELF-MONITORING REPORT?		<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA
SECTION E - FLOW MEASUREMENT		
PERMITTEE FLOW MEASUREMENT MEETS PERMIT REQUIREMENTS. DETAILS:		<input type="checkbox"/> S <input checked="" type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA (FURTHER EXPLANATION ATTACHED <u>YES</u>)
1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED. TYPE OF DEVICE ____ An outside contractor has not been to this facility to check the calibration, Operators do Quarterly checks. The staff gauge is positioned on the wrong side of the Parshall Flume for the operators to read. It should be reinstalled and calibrated on the opposite wall for better access.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
2. FLOW MEASURED AT EACH OUTFALL AS REQUIRED.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
3. SECONDARY INSTRUMENTS (TOTALIZERS, RECORDERS, ETC.) PROPERLY OPERATED AND MAINTAINED.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
4. CALIBRATION FREQUENCY ADEQUATE. (DATE OF LAST CALIBRATION <u>August 4, 2016</u>) Calibrations should be done when water is flowing. RECORDS MAINTAINED OF CALIBRATION PROCEDURES. CALIBRATION CHECKS DONE TO ASSURE CONTINUED COMPLIANCE.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
5. FLOW ENTERING DEVICE WELL DISTRIBUTED ACROSS THE CHANNEL AND FREE OF TURBULENCE.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
6. HEAD MEASURED AT PROPER LOCATION.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
7. FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGE OF FLOW RATES.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
SECTION F – LABORATORY		
PERMITTEE LABORATORY PROCEDURES MEET PERMIT REQUIREMENTS. DETAILS:		<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA (FURTHER EXPLANATION ATTACHED <u>YES</u>)
1. EPA APPROVED ANALYTICAL PROCEDURES USED (40 CFR 136.3 FOR LIQUIDS, 503.8(b) FOR SLUDGES)		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA

Doña Ana County South Central Regional Wastewater Treatment Facility						PERMIT NO. NM0030490	
SECTION F - LABORATORY (CONT'D)							
2. IF ALTERNATIVE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA	
3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT.						<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA	
4. QUALITY CONTROL PROCEDURES ADEQUATE.						<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA	
5. DUPLICATE SAMPLES ARE ANALYZED. <u>10</u> % OF THE TIME.						<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA	
6. SPIKED SAMPLES ARE ANALYZED. <u>Once a year</u> % OF THE TIME. The permittee takes part in the DMR-QA study yearly						<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA	
7. COMMERCIAL LABORATORY USED.						<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA	
LAB NAME		Water Technology Associates		Bio Aquatic Testing, Inc. 972-242-7750			
LAB ADDRESS		4200 S. Research Dr.,Genesis B. Las Cruces		Carrolton, TX			
PARAMETERS PERFORMED		Occasionally BOD, E.coli, TSS/ Sludge		WET			
SECTION G - EFFLUENT/RECEIVING WATERS OBSERVATIONS. <input type="checkbox"/> S <input checked="" type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA (FURTHER EXPLANATION ATTACHED <u>NO</u>).							
OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOAT SOL.	COLOR	OTHER
001	NO	NO	Slight	NO	YES	Slightly tan	NO
RECEIVING WATER OBSERVATIONS: The Effluent as described above was observed at the Ultra Violet Disinfection treatment unit (photo #18), which is the final treatment process							
SECTION H - SLUDGE DISPOSAL							
SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS. DETAILS:				<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA (FURTHER EXPLANATION ATTACHED <u>NO</u>).			
1. SLUDGE MANAGEMENT ADEQUATE TO MAINTAIN EFFLUENT QUALITY.						<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA	
2. SLUDGE RECORDS MAINTAINED AS REQUIRED BY 40 CFR 503.						<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA	
3. FOR LAND APPLIED SLUDGE, TYPE OF LAND APPLIED TO: <u>SURFACE DISPOSAL</u> (e.g., FOREST, AGRICULTURAL, PUBLIC CONTACT SITE)							
SECTION I - SAMPLING INSPECTION PROCEDURES (FURTHER EXPLANATION ATTACHED <u>NO</u>).							
1. SAMPLES OBTAINED THIS INSPECTION.						<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA	
2. TYPE OF SAMPLE OBTAINED							
GRAB _____		COMPOSITE SAMPLE _____		METHOD _____		FREQUENCY _____	
3. SAMPLES PRESERVED.						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA	
4. FLOW PROPORTIONED SAMPLES OBTAINED.						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA	
5. SAMPLE OBTAINED FROM FACILITY'S SAMPLING DEVICE.						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA	
6. SAMPLE REPRESENTATIVE OF VOLUME AND MATURE OF DISCHARGE.						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA	
7. SAMPLE SPLIT WITH PERMITTEE.						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA	
8. CHAIN-OF-CUSTODY PROCEDURES EMPLOYED.						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA	
9. SAMPLES COLLECTED IN ACCORDANCE WITH PERMIT.						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA	

Introduction

On January 27, 2017 Barbara Cooney of the New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB) conducted a Compliance Evaluation Inspection (CEI) at the South Central Regional Wastewater Treatment Plant (WWTP) in Doña Ana County, New Mexico. The facility has a design flow of 1.05 million gallons per day (MGD) and is classified as a major municipal discharger under the federal Clean Water Act, Section 402, of the National Pollutant Discharge Elimination System (NPDES) permit program. It is assigned NPDES permit number NM0030490, which regulates discharge of treated municipal wastewater from outfall 001 to the Rio Grande in Segment 20.6.4.101 State of New Mexico Standards for Interstate and Intrastate Surface Waters, 20.6.4 New Mexico Administrative Code (NMAC).

The NMED performs a certain number of CEIs each year for the U.S. Environmental Protection Agency (USEPA), Region VI. The purpose of this inspection is to provide the USEPA with information to evaluate the Permittee's compliance with the NPDES permit. This inspection report is based on information provided by the Permittee's representatives, observation made by the NMED inspector, and records and reports kept by the Permittee and/or NMED.

Inspection Details

The inspector arrived at the facility at 10:20 hours on January 27, 2017, made introductions, explained the purpose of the inspection, presented credentials and toured the plant and laboratory with Ms. Mireya Carnero, Utilities Director / Plant Supervisor and Mr. Jesus (Chewy) Reyas, Operator and Laboratory Analyst. An exit interview to discuss preliminary findings was conducted with Ms. Carnero on site following the inspection. The inspector left the facility at approximately 12:50 hours.

Treatment Scheme

Raw domestic sewage, collected from 28 lift stations and 16-inch force main, enters the plant's lift station and is then pumped to the entrance head works. According to the on-site permittee representative, influent flows are not measured. An on-site diesel generator is exercised once a week for approximately 30 minutes according to the on-site permittee representative.

At the entrance works, raw sewage flows through a 5 horsepower JWC Environmental shredder and then through a JWC Auger Monster. Rags are separated and dropped down a chute and into a container. A manual bar screen is available for a by-pass during maintenance. Influent then flows through a US Filter Link-Belt C&9 Grit Collector. Flow is routed through a grit chamber and passes to an equalization basin. At the time of this inspection the grit removal system was not operational.

There are two trains of Sequencing Batch Reactor (SBR) basins at the facility. Only one SBR basin is operated at a time for wastewater treatment. Floating solids and scum are collected manually. The reactor basins are designed to operate in a diffused aeration, clarification, and clear liquid decant sequence. Six, four-hour cycles are run per day in the aeration unit used to treat wastewater. The decant water flows to the UV disinfection unit. The unit has two independent banks of UV bulbs which are on at the same time. Effluent flow is measured by an 18" Parshall flume and a Milltronics ultrasonic level transducer.

After a programmed time interval, the aeration is stopped to allow for settling of the microorganisms and other solids from the treated wastewater. The solids settle to the bottom of the reactor and are either retained within the reactor (RAS) or wasted (WAS) to a sludge holding tank (aerobic digester unit). The aerobic digester unit is adjacent to the north of SBR #1 (north).

**NMED/SWQB
Official Photograph Log
Photo # 1**

Photographer: Google Earth

Date: Unknown

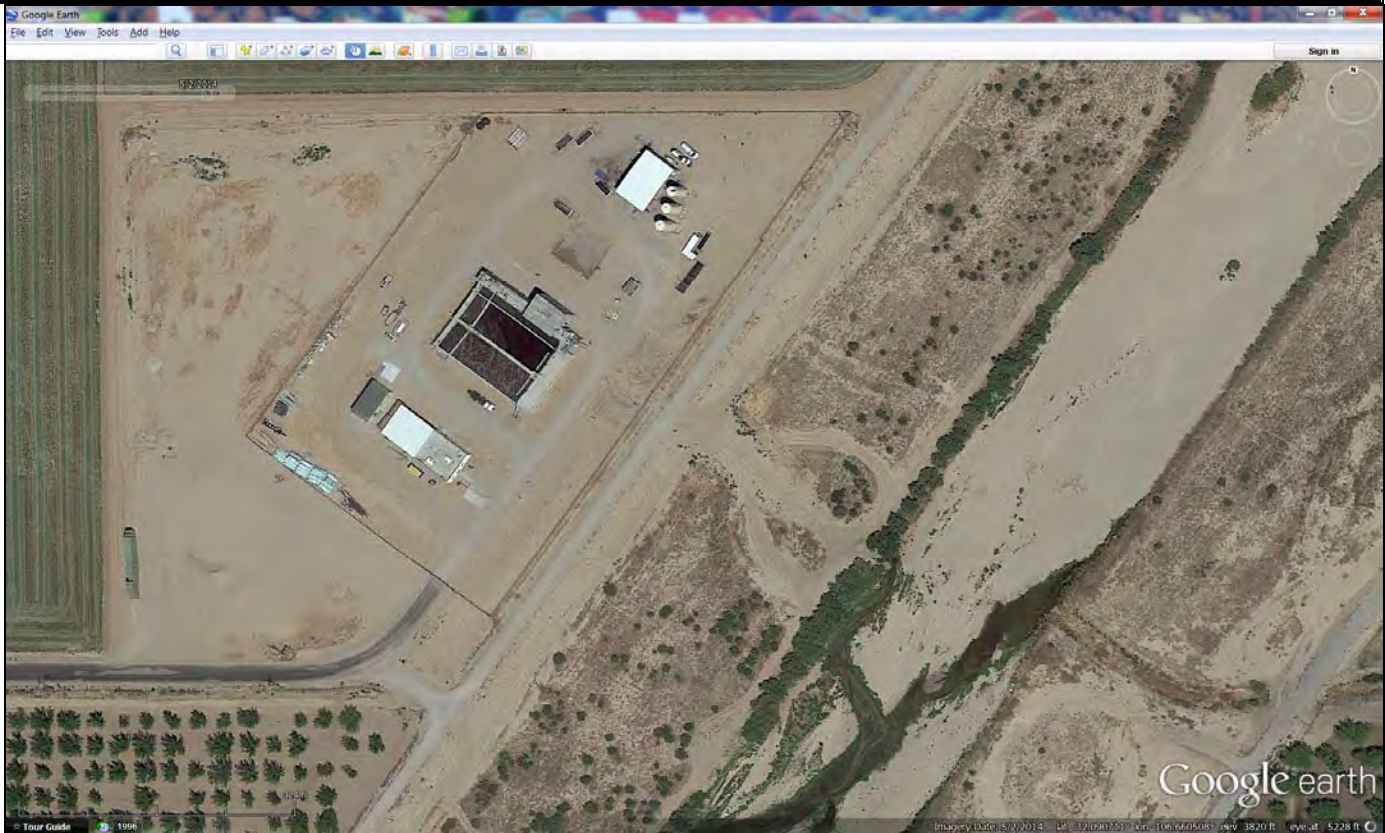
Time: Unknown

City/County: Vado / Doña Ana County

State: New Mexico

Location: Doña Ana County - South Central Regional Wastewater Treatment Plant

Subject: Aerial View of the facility and the discharge location to the Rio Grande. In this photo, it can be seen that the discharge creates a perennial reach of the river during times of low flow.



**NMED/SWQB
Official Photograph Log
Photo # 2**

Photographer: Google Earth

Date: Unknown

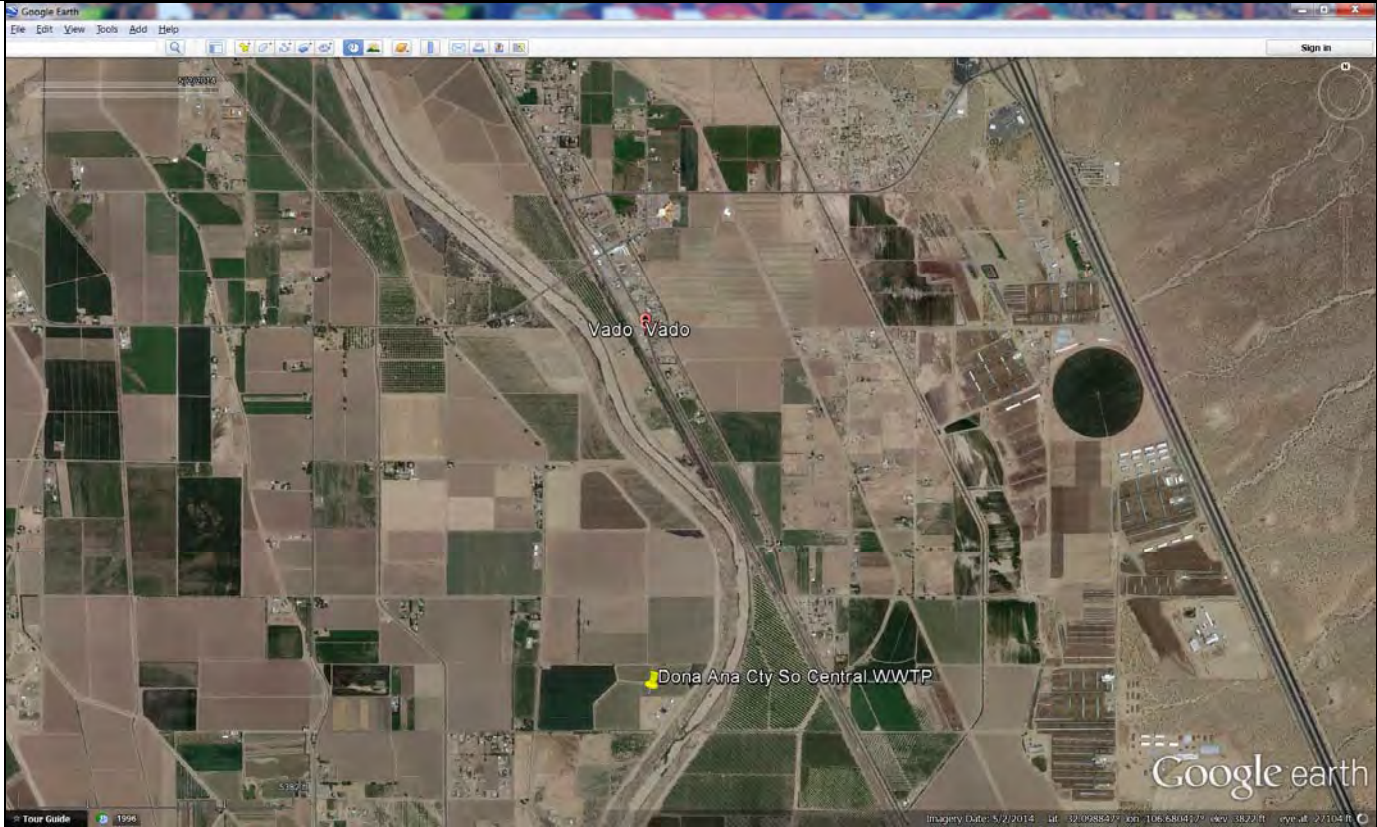
Time: Unknown

City/County: Vado / Doña Ana County

State: New Mexico

Location: Doña Ana County - South Central Regional Wastewater Treatment Plant

Subject: The service area including the town of Vado, extends through a widely dispersed area with a flat grade, increasing the residence time of sewage in the collection system. The sewage is very septic by the time it reaches the facility.



**NMED/SWQB
Official Photograph Log
Photo #3**

Photographer: B. Cooney

Date: 01/27/2017

Time: 11:02 Hours

City/County: Vado / Doña Ana County

State: New Mexico

Location: Doña Ana County - South Central Regional Wastewater Treatment Plant

Subject: Septage Receiving station currently has no monitoring apparatus.



**NMED/SWQB
Official Photograph Log
Photo #4**

Photographer: B. Cooney

Date: 01/27/2017

Time: 11:02 Hours

City/County: Vado / Doña Ana County

State: New Mexico

Location: Doña Ana County - South Central Regional Wastewater Treatment Plant

Subject: Septage holding tanks are used for storage of incoming septage before being sent to the aeration basin for treatment. The sludge belt press for solids after aeration is also seen in covered area.



**NMED/SWQB
Official Photograph Log
Photo # 5**

Photographer: B. Cooney	Date: 01/27/2017	Time: 11:04 Hours
City/County: Vado / Doña Ana County		State: New Mexico
Location: Doña Ana County - South Central Regional Wastewater Treatment Plant		
Subject: Overflow pond for solids/septage. The area is earthen bermed and the pond is lined on the bottom with asphalt. There was no track-out of solids evident at the pond on the day of the inspection.		



**NMED/SWQB
Official Photograph Log
Photo # 6**

Photographer: B. Cooney	Date: 01/27/2017	Time: 11:05 Hours
City/County: Vado / Doña Ana County		State: New Mexico
Location: Doña Ana County - South Central Regional Wastewater Treatment Plant		
Subject: Roll-off dumpsters used for hauling processed sludge to the landfill. The area was clear of debris. The dumpsters are sitting on bare ground, without secondary containment. The majority of the treatment plant around the process area is bare ground. The potential exists for infiltration on this site to ground water for any spilled waste. The entire areas could benefit from being paved and bermed. This segment of the Rio Grande is impaired for E.coli bacteria.		



**NMED/SWQB
Official Photograph Log
Photo # 7**

Photographer: B. Cooney

Date: 01/27/2017

Time: 11:45 Hours

City/County: Vado / Doña Ana County

State: New Mexico

Location: Doña Ana County - South Central Regional Wastewater Treatment Plant

Subject: Another view of the roll-off dumpsters and the septage back up holding pond. From this higher point of view it appeared that the berms were recently enforced with dirt, based on the tracks around the berms.



**NMED/SWQB
Official Photograph Log
Photo # 8**

Photographer: B. Cooney

Date: 01/27/2017

Time: 11:12 Hours

City/County: Vado / Doña Ana County

State: New Mexico

Location: Doña Ana County - South Central Regional Wastewater Treatment Plant

Subject: Influent & effluent pipes to and from the above ground treatment system.



**NMED/SWQB
Official Photograph Log
Photo # 9**

Photographer: B. Cooney

Date: 01/27/2017

Time: 11:43 Hours

City/County: Vado / Doña Ana County

State: New Mexico

Location: Doña Ana County - South Central Regional Wastewater Treatment Plant

Subject: Headworks automated bar screen and grit removal system. The grit removal system is out of order. Allowing grit to into the aeration basins can cause added maintenance issues particularly for hydraulic decanters and air diffusers.



**NMED/SWQB
Official Photograph Log
Photo # 10**

Photographer: B. Cooney

Date: 01/27/2017

Time: 11:44 Hours

City/County: Vado / Doña Ana County

State: New Mexico

Location: Doña Ana County - South Central Regional Wastewater Treatment Plant

Subject: North Aeration basin, septic waste is sent through this basin. The bright blue of this basin is typical of the products used in porta-potties as an antiseptic and odor reducer. The chemicals in these products as well as the unknown constitution of the septage received at the facility appears to interfere with the biological growth necessary for an activated sludge treatment process.



**NMED/SWQB
Official Photograph Log
Photo # 11**

Photographer: B. Cooney

Date: 01/27/2017

Time: 11:36 Hours

City/County: Vado / Doña Ana County

State: New Mexico

Location: Doña Ana County - South Central Regional Wastewater Treatment Plant

Subject: South Aeration Basin, domestic waste is treated in this basin. The air diffusers were on and no dead spots (areas where diffusers were not reaching) were observed. The sludge in the basin appeared slightly less rich brown than optimal and there was evidence of grease in the basins. The grease is likely a result of residential cooking. As part of a pretreatment program, it may be valuable to include an educational pamphlet to residents discouraging pouring grease down the drain.



**NMED/SWQB
Official Photograph Log
Photo # 12**

Photographer: B. Cooney

Date: 01/27/2017

Time: 11:32 Hours

City/County: Vado / Doña Ana County

State: New Mexico

Location: Doña Ana County - South Central Regional Wastewater Treatment Plant

Subject: The sludge aerobic (aerated) digester on the far north of the aeration basins. Sludge from both aerated basins, is sent through this sludge digester where aeration occurs 24 hours / 7 days a week. The comingled solids are then sent to the belt press for dewatering and finally loaded into roll off dumpsters for disposal at the landfill.



**NMED/SWQB
Official Photograph Log
Photo # 13 & 14**

Photographer: B. Cooney

Date: 01/27/2017

Time: 11:29 & 11:22 Hours

City/County: Vado / Doña Ana County

State: New Mexico

Location: Doña Ana County - South Central Regional Wastewater Treatment Plant

Subject: Effluent Weir and Flow measurement. Parshall Flume & Ultrasonic Sensor. The sensor calibration is checked against the staff gage quarterly by operators though never by an outside flow meter specialist.



**NMED/SWQB
Official Photograph Log
Photo # 15 & 16**

Photographer: B. Cooney

Date: 01/27/2017

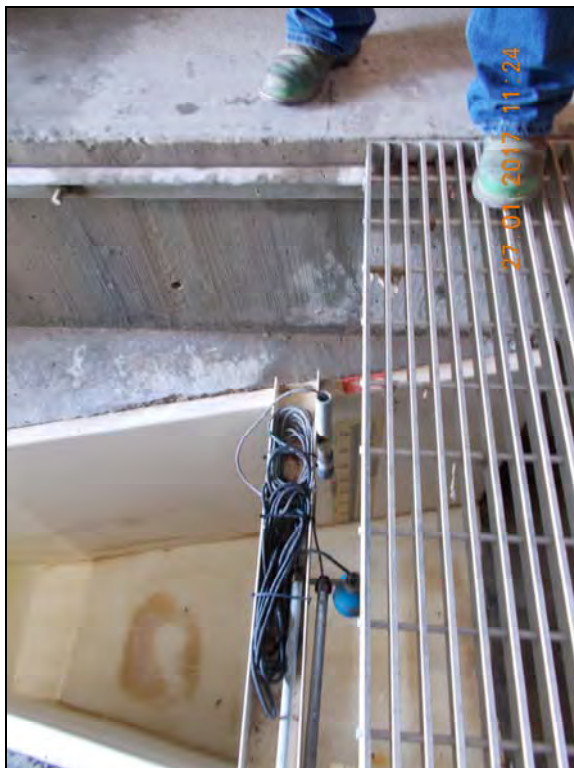
Time: 11:24 & 11:25 Hours

City/County: Vado / Doña Ana County

State: New Mexico

Location: Doña Ana County - South Central Regional Wastewater Treatment Plant

Subject: Effluent Weir and Flow measurement. Parshall Flume & Ultrasonic Sensor (another view). The staff gage is on the wrong side of the flume for operators to see easily.



**NMED/SWQB
Official Photograph Log
Photo # 17**

Photographer: B. Cooney

Date: 01/27/2017

Time: 11:16 Hours

City/County: Vado / Doña Ana County

State: New Mexico

Location: Doña Ana County - South Central Regional Wastewater Treatment Plant

Subject: Ultraviolet Disinfection System, two banks of 12 lights each.



**NMED/SWQB
Official Photograph Log
Photo # 18**

Photographer: B. Cooney

Date: 01/27/2017

Time: 11:18 Hours

City/County: Vado / Doña Ana County

State: New Mexico

Location: Doña Ana County - South Central Regional Wastewater Treatment Plant

Subject: Effluent water past the ultraviolet disinfection system. Though the bottle is stained it was evident the water was slightly turbid with floating solids.



**NMED/SWQB
Official Photograph Log
Photo # 19**

Photographer: B. Cooney

Date: 01/27/2017

Time: 12:02 Hours

City/County: Vado / Doña Ana County

State: New Mexico

Location: Doña Ana County - South Central Regional Wastewater Treatment Plant

Subject: Rio Grande at the outfall, upstream the river was dry at the time of this inspection. The WWTP effluent created a perennial flow including pools.



One SBR activation basin was being used to treat septage brought to the facility by contract septage haulers. After treatment in this unit, the solids portion of the septage is sent to the digester in preparation for mixing with the digested activated sludge and sent on to the belt filter press. The decant liquids are mixed with the treated domestic wastewater from the other SBR and sent through disinfection.

Solids

Sludge is wasted six times per day. Waste Activated Sludge (WAS) is pumped to the aerobic digester for dewatering and thickening. The digester is located in a long open channel just north of the two activation basins. Thickened sludge is pumped to a filter press. Flow from the plant wash down and decant from the belt press are returned to the plant lift station and recirculated. A polymer is added to the sludge to enhance processing. Processed sludge is currently being hauled to the Corralitos Landfill in roll-off dumpsters.

Further Explanations

Note: The sections are arranged according to the format of USEPA Form 3560-3 and checklist, attached, rather than being ranked in order of importance.

Permit

Overall Rating For Permit Verification (Satisfactory)

Record Keeping and Reporting

Overall Rating For Record Keeping and Reporting (Satisfactory)

Records were reviewed for the third quarter 2016.

The EPA required permittees to transition from submitting DMRs as paper copies to the NetDMR system in December 2016. The permittee has begun submitting reports through this new system in December.

Operations And Maintenance

Overall Rating For Operation and Maintenance (Marginal)

Permit Requirements For Operation And Maintenance

The permit requires in Part III. B.

3. Proper Operations and Maintenance

a. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by permittee as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants and will achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

Findings For Operation and Maintenance

1. The facility has two trains for treatment with one dedicated for septage. There are no back up units if an activation basin must be taken down for service. The decant from the septage side is blended with the decant from the domestic waste side before flowing to disinfection then is discharged to the Rio Grande.

2. Septage accepted at this facility is only monitored for volume. According to operators, this is the only facility in Dona Ana County that accepts septage and facilities in Texas and the El Paso area also send septage here.

The volume of septage received is estimated by operators to be 100,400 gallons per month or an average of 3347 gpd. However the receipt of septage does vary every day.

3. The grit removal system following the head works, was out of operation.
4. The decant arm for north activation basin was out of order. Parts were ordered and repairs were scheduled.
5. UV disinfection light channel had debris in the chamber and according to operators has not been cleaned. This could be contributing to the suspended solids observed in the effluent water. Floating solids were seen in the samples taken past the UV channel during the inspection.

Self-Monitoring

Overall Rating For Self Monitoring (Satisfactory)

Flow Measurement

Overall Rating For Flow Measurement (Marginal)

Permit Requirements For Flow Measurement

The permit requires in Part III. C.6.

6. FLOW MEASUREMENTS

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes.

Findings For Flow Measurement

1. The flow meter consists of an 18 inch Parshall Flume and staff gauge with a backup ultrasonic sensor. The staff gauge is checked against the ultrasonic sensor on a quarterly basis. It was observed in the facility records that many of those checks were done at zero discharge. It is suggested that when there is zero flow, that an additional check be done on that day when flow is present.
2. There has not been an outside, independent specialist in to check the flow meter since it was installed. The meter checks the operators are doing are valuable in maintaining flow reading accuracy, and should also be supported by an independent flow meter check and calibration on an annual basis.
3. The staff gauge is located on the sidewall of the Parshall Flume where the operator stands, so it is very hard to see without looking down at a steep angle. This could skew the accuracy of the reading of the water level. It is suggested the staff gauge be installed on the opposite side of the Parshall Flume wall for a better view, and possible more accurate readings.

Laboratory

Overall Rating For Laboratory (Satisfactory)

Permit Requirements For Laboratory

The permit requires in Part III.B.3.

a. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by permittee as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants and will achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

40CFR136.3 Identification of test procedures lists in Table 1A:

TABLE 1A—LIST OF APPROVED BIOLOGICAL METHODS FOR WASTEWATER AND SEWAGE SLUDGE

Parameter and units	Method ¹	EPA	Standard methods	AOAC, ASTM, USGS	Other
Bacteria:					
5. <i>E. coli</i> , number per 100 mL ²¹	MPN ^{6 8 18} multiple tube, or		9221B.1-2006/9221F-2006 ^{12 14}		
	multiple tube/multiple well, or		9223 B-200 4 ¹³	991.15 ¹⁰	Colilert ^{®13 18} Colilert-18 ^{®13 17 18}
	MF ^{2 6 7 8} single step	1603 ²²			mColiBlue-24 ^{®19}
6. Fecal streptococci, number per 100 mL	MPN, 5 tube 3 dilution, or	p. 139 ³	9230 B-2007.		
	MF ² , or	p. 136 ³	9230 C-2007	B-0055-85 ⁴	
	Plate count	p. 143 ³			
7. Enterococci, number per 100 mL ²²	MPN ^{6 8} , multiple tube/multiple well, or			D6503-99 ⁹	Enterolert ^{®13 24}
	MF ^{2 6 7 8} single step or	1600 ²⁵	9230 C-2007		
	Plate count	p. 143 ³			

The method Hach10029 for m-ColiBlue24 can be found at this website:

<https://www.hach.com/quick.search-download.search.jsa?keywords=10029%20m-colibblue>

Finding For Laboratory

1. The November 2, 2016 records show *E. coli* bacteria samples are analyzed using, *Hach10029 m-ColiBlue24* though not following the procedures listed by only running blanks and one 50 ml sample. It is suggested that duplicate volumes be run at least 10% of the time as part of adequate laboratory controls and appropriate quality assurance procedures and additional volumes tested be added, including a 100 ml sample. The procedures listed by Hach for this method suggest using 3 dilution volumes to obtain 20 to 200 colonies per sample.

Effluent And Receiving Water

Overall Rating For Effluent And Receiving Water (Marginal)

Permit Requirements For Effluent and Receiving Water

The permit requires in Part I.A. Limitations and Monitoring Requirements:

FLOATING SOLIDS, VISIBLE FOAM AND/OR OILS

There shall be no discharge of floating solids or visible foam in other than trace amounts.

There shall be no discharge of visible films of oil, globules of oil, grease or solids in or on the water, or coatings on stream banks.

The permit requires in Part 1. Section A.1.

EFFLUENT CHARACTERISTICS		DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
POLLUTANT	STORET CODE	Standard Units		MEASUREMENT FREQUENCY	SAMPLE TYPE
		MINIMUM	MAXIMUM		
pH	00400	6.6	9.0	5/Week	Grab

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS						MONITORING REQUIREMENTS	
	lbs/day, unless noted			mg/l, unless noted			MEASUREMENT FREQUENCY	SAMPLE TYPE
POLLUTANT	30-DAY AVG	DAILY MAX	7-DAY AVG	30-DAY AVG	DAILY MAX	7-DAY AVG		
Flow	Report MGD	Report MGD	Report MGD	N/A	N/A	N/A	Continuous	Totalizing Meter
Biochemical Oxygen Demand, 5-day (BOD)	263	N/A	394	30	N/A	45	Once/Week	6-Hr Composite (*1)
BOD Percent Removal	N/A	N/A	N/A	>=85% (*2)	N/A	N/A	Once/Week	Calculation
Total Suspended Solids (TSS)	263	N/A	394	30	N/A	45	Once/Week	6-Hr Composite (*1)
TSS Percent Removal	N/A	N/A	N/A	>=85% (*2)	N/A	N/A	Once/Week	Calculation
E. Coli Bacteria	N/A	N/A	N/A	126 (*3)	410 (*3)	N/A	Once/Week	Grab
Total Residual Chlorine	N/A	N/A	N/A	N/A	19 ug/l	N/A	Once/Day	Instantaneous Grab (*4)

The permit requires in Part I.A. Limitations and Monitoring Requirements:

FLOATING SOLIDS, VISIBLE FOAM AND/OR OILS

There shall be no discharge of floating solids or visible foam in other than trace amounts.

There shall be no discharge of visible films of oil, globules of oil, grease or solids in or on the water, or coatings on stream banks.

Findings For Effluent And Receiving Water

1. Floating solids were observed in effluent samples taken at the end of the Ultraviolet Disinfection treatment system.

2. No effluent exceedences reported on the Discharge Monitoring Reports for the six months prior to this inspection.

Sludge Handling

Overall Rating For Sludge Handling (Satisfactory)

Pretreatment

Overall Rating For Pretreatment (Marginal)

Permit Requirements for Pretreatment

The permit requires in Part II.D. Contributing Industries and Pretreatment Requirements:

1. The following pollutants may not be introduced into the treatment facility:

a. Pollutants which create a fire or explosion hazard in the publicly owned treatment works (POTW), including, but not limited to, wastestreams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21;

b. Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, unless the works are specifically designed to accommodate such discharges;

c. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW, resulting in Interference;

d. Any pollutant, including oxygen demanding pollutants (e.g., BOD), released in a discharge at a flow rate and/or pollutant concentration which will cause Interference with the POTW;

e. Heat in amounts which will inhibit biological activity in the POTW resulting in Interference but in no case heat in such quantities that the temperature at the POTW treatment plant exceeds 40 degrees Centigrade (104 degrees Fahrenheit) unless the Approval Authority, upon request of the POTW, approves alternate temperature limits;

f. Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;

g. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; and

h. Any trucked or hauled pollutants, except at discharge points designated by the POTW.

2. The permittee shall require any indirect discharger to the treatment works to comply with the reporting requirements of Sections 204(b), 307, and 308 of the Act, including any requirements established under 40 CFR Part 403.

3. The permittee shall provide adequate notice of the following:

a. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Sections 301 and 306 of the Act if it were directly discharging those pollutants; and

b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit.

c. Any notice shall include information on (i) the quality and quantity of effluent to be introduced into the treatment works, and (ii) any anticipated impact of the change on the quality or quantity of effluent to be discharged from the POTW.

Findings For Pretreatment

The permittee has drafted a pretreatment program, but has not implemented changes yet and continues to accept septage unmonitored at the facility. It is advisable for the permittee to consider establishing local limits and restricting the septage received at the facility by monitoring pH and other pollutants dependant on the type of septage being received. This is a common practice for other facilities in the state that allow the receipt of septage.

The septage being accepted at the WWTP requires an entire treatment train to be processed, separate from the domestic waste entering the facility. As populations grow in the area and more domestic waste is generated, the facility may need both trains to process domestic waste. It is advisable for the County to consider other options for managing septage waste in the future. **This is a repeat finding.**